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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,408	05/05/2006	Isao Suzuki	Q94708	1650
23373 7590 05/28/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER ARCIERO, ADAM A				
ART UNIT		PAPER NUMBER		
1795				
MAIL DATE		DELIVERY MODE		
05/28/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/578,408

Applicant(s)

SUZUKI ET AL.

Examiner

ADAM A. ARCIERO

Art Unit

1795

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-18 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-18 and 22-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

BATTERY

Examiner: Adam Arciero S.N. 10/578,408 Art Unit: 1795 May 21, 2009

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 24, 2009 has been entered. Claims 12-18 are amended. Claims 19-21 are cancelled. Claims 22-28 are newly added.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

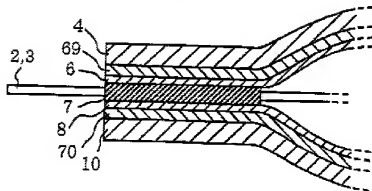
3. The claim rejections under 35 U.S.C. 112, second paragraph, on claims 12-21 are withdrawn, because the claims have been either amended or cancelled.

Claim Rejections – 35 USC § 103

4. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over HANAFUSA et al. and TERAHARA et al. on claims 12-15 and 17-21 are maintained.

As to Claims 12, 17, 22 and 27, HANAFUSA et al. discloses a battery comprising a cathode, an anode and a separator (power generating element) accommodated in a battery case (Abstract). Said battery case is composed of a sheet comprising a laminate of an aluminum foil 69,70 and a resin layer 4,10 (pg. 1, [0006] and pg. 12, [0220] and Fig. 36). A cover member 6,8 is provided between said power generating element and said battery case. Said cathode and anode comprise respective lead terminals 2,3 (Fig. 36). Said cover member 6,8 comprises two covers 6,8 which face each other (superimposed) thereby holding a lead terminal 2,3 between them (Fig. 36).

FIG.36



HANAFUSA et al. does not expressly disclose wherein said anode and cathode comprise non-coated portions and wherein said cover member 6,8 covers said non-coated portions.

However, TERAHARA et al. teaches of a nonaqueous electrolyte battery which comprises an anode sheet and a cathode sheet. The end parts of said anode and cathode (power generating elements) comprise a non-coated part (on the surface of power generating element) to

which a nickel ribbon (for the anode) and an aluminum ribbon (for the cathode) (terminal leads) is welded to so as to provide a lead body for the emergence of current (col. 10, lines 30-46). At the time of the invention, it would have been obvious to one of ordinary skill in the art to provide a non-coated portion at the end of the cathode and anode (power generating elements) of the battery of HANAFUSA et al. because TERAHARA et al. teaches that the terminal leads can be welded thereby giving an emergence of current from the battery (col. 10, lines 30-46). The non-coated portions of HANAFUSA et al. and TERAHARA et al. are covered by the cover member **6,8**.

As to Claim 13, HANAFUSA et al. discloses two cover members **6,8** which cover said power generating element, said cover members are cup-shaped and open sides of said cover members face each other (Fig. 36).

As to Claim 14, HANAFUSA et al. discloses lead terminals for the cathode and anode **2,3** (Fig. 36).

As to Claim 15, HANAFUSA et al. discloses wherein said power generating element is entirely covered with said two cover members **6,8** in said battery case (Fig. 36).

As to Claim 18, HANAFUSA et al. teaches that said covers **6,8** encompass (cup) the power generating element, therefore said covers **6,8** are cup-shaped (Fig. 37).

As to Claim 20, HANAFUSA et al. teaches the battery according to claim 18, wherein open sides of said two covers **6,8** face each other, while holding said lead terminal **2,3** between them (Fig. 37).

As to Claim 23, HANAFUSA et al. discloses wherein said cover members are cup-shaped, encompassing said power generating element (fig. 36).

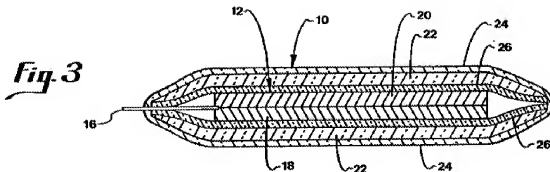
As to Claim 24, HANAFUSA et al. discloses wherein said anode and cathode comprise lead terminals **2,3** which are held between said cover members (Fig. 36).

As to Claim 25, HANAFUSA et al. discloses wherein said power generating element is entirely covered with said two cover members (Fig. 36).

As to Claim 28, HANAFUSA et al. discloses wherein said two cover members are cup-shaped and said open sides face each other (Fig. 36).

5. The claim rejections under 35 U.S.C. 103(a) as being unpatentable over HANAFUSA et al., TERAHARA et al. and LAKE on claim 16 is maintained.

As to Claim 16, the combination of HANAFUSA et al. and TERAHARA et al. does not expressly disclose wherein the superimposed portion of said two covers faces the non-coated portion and faces a superimposed portion of the flexible sheet, on the opposite side to the non-coated portion. However, LAKE teaches a battery package **10** comprising a flexible base film **22** that covers and encloses the battery **12** and a flexible layer **24** of an inorganic material deposited on said base film **22** to enclose and seal the battery **12** (col. 3, lines 42-51 and Fig. 3). As can be seen in Figure 3 (shown below), the superimposed portion of said covers (base film) **22** faces the non-coated portion with one side. The opposite side of said superimposed portion of said covers **22** faces a superimposed portion of said flexible sheet **24**.



At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the battery packaging of HANAFUSA et al. and TERAHARA et al. so as to have a superimposed portion of said two covers 22 facing both a non-coated portion and a superimposed portion of a flexible sheet 24, because LAKE teaches that such a flexible composite package is impervious to gas and water vapor transmission as well as being able to be shaped to conform to an irregular or curved surface (col. 2, lines 47-54).

Response to Arguments

7. Applicant's arguments filed April 24, 2009 have been fully considered but they are not found to be persuasive.

Applicant's principal arguments are:

a) Neither HANAFUSA et al. or TERAHARA et al. discloses anything regarding a position of the non-coated portion of the power generating element, let alone that said non-coated portion is exposed on a surface of said power generating element (claim 12).

b) HATAZAWA, cited in the first Office action does not teach non-coated portions of electrodes which are covered by a cover member (claim 12)..

In response to Applicant's arguments, please consider the following comments.

a) HANAFUSA et al. as combined with TERAHARA et al. above, teach wherein non-coated portions of the electrodes (surface of power generating elements) are covered by the cover member of HANAFUSA et al.

b) Examiner did not use HATAZAWA as prior art in the present Office action and is unclear as to what Applicant is arguing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADAM A. ARCIERO whose telephone number is (571)270-5116. The examiner can normally be reached on Monday to Friday 8am to 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on 571-272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AA

/Dah-Wei D. Yuan/
Supervisory Patent Examiner, Art Unit 1795